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Claims

What is claimed:

1. A software testing device, comprising:

a processor;

a memory coupled to the processor; and

program instructions provided to the memory and executable by the processor to:

register which kinds of assertions fail most often during testing of software code;

analyze the kinds of assertions which fail most often against a set of questions (rules); and

score the assertions which fail.

2. The device of claim 1, further including program instructions which execute to collect a history of assertions which fail in a system under test.

3. The device of claim 1, further including program instructions that execute to assign points to the assertions which fail.

4. The device of claim 1, wherein the assertions include assertions selected from the group of:

null pointer assertions;

locking assertions; and

object state assertions.

5. The device of claim 1, further including program instructions that execute to register assertions which fail as received from hardware and software components selected from the group of:

a compiler;

a debugger;

a test controller; and

an integrated development environment (IDE).

6. The device of claim 1, further including program instructions that execute to collectively analyze assertion failures across a number of systems under test.

7. The device of claim 1, further including program instructions that execute to identify types of assertions which fail.

8. The device of claim 1, further including program instructions that execute to automatically generate feedback on identified types of assertions which fail across different systems under test to improve application of assertions in a coding process.

9. The device of claim 1, further including program instructions that execute to correlate an instance of a failed assertion with a type of assertion.

10. The device of claim 1, wherein the device is connected to a system under test, wherein the system under test includes a computing device connected to a local area network (LAN) having software code executing thereon.

11. The device of claim 1, wherein the device is connected to a system under test, wherein the system under test includes a computing device connected to a wide area network (WAN).

12. A software testing system, comprising:

a computing device having software code executing thereon; and

a software testing device coupled to the computing device, the software testing device, comprising:

a processor;

a memory coupled to the processor; and

program instructions provided to the memory and executable by the processor to:

register assertions which fail in association with the software code executing on the computing device;

analyze assertions which fail against a set of rules to determine a kind of assertion which repeatedly fails;

collect a history of assertions which fail in association with the software code executing on the computing device; and

score the assertions which fail.

13. The system of claim 12, further including program instructions that execute to correlate assertions which fail with a type of assertion in the software code executing on the computing device.

14. The system of claim 12, further including program instructions that execute to assign points to assertions which fail in association with the software code executing on the computing device.

15. The system of claim 12, wherein the assertions include assertions selected from the group of:

null pointer assertions;

locking assertions; and

object state assertions.

16. The system of claim 12, further including program instructions that execute to register assertions which fail as received from hardware and software components selected from the group of:

a compiler;

a debugger;

a test controller; and

an integrated development environment (IDE).

17. The system of claim 12, further including program instructions that execute to collectively analyze assertion failures in association with software

code executing on a number of computing devices connected to the software testing device.

18. The system of claim 17, further including program instructions that execute to:

collect a history of assertions which fail in association with the software code executing on the number of computing devices connected to the software testing device; and

correlate assertion failures according to one or more types of assertions in the software code executing on the number of computing devices connected to the software testing device.

19. The system of claim 12, further including program instructions that execute to automatically generate feedback on identified types of assertions which failed in the software code executing in an integrated development environment to improve application of assertions in a coding process.

20. The system of claim 19, further including program instructions that execute to generate a report identifying one or more failed assertions by instance of failed assertion type.

21. The system of claim 20, further including program instructions that execute to transmit the report, identifying one or more failed assertions by instance of failed assertion type, to a developer of the software code.

22. The system of claim 12, further including program instructions that execute to register and analyze various failures which are not represented by assertions in association with the software code executing on the computing device.

23 The system of claim 22, further including program instructions that execute to;

collect a history of the various failures which are not represented by assertions in association with the software code executing on the computing device; and

score the various failures in association with the software code executing on the computing device according to a failure type.

24. A method for software testing, comprising:

registering assertions which fail during testing of software code;

analyzing failed assertions against a set of questions; and

scoring failed assertions based on analyzing failed assertions against a set of questions.

25. The method of claim 24, wherein the method includes registering which types of assertions fail most frequently during testing of software code.

26. The method of claim 25, wherein the method includes collecting a history of assertions which fail in a system under test.

27. The method of claim 24, wherein the method includes registering assertions which fail as received from hardware and software components selected from the group of:

a compiler;

a debugger;

a test controller; and

an integrated development environment (IDE).

28. The method of claim 24, wherein the method includes assigning points to the assertions which fail.

29. The method of claim 24, wherein the method includes registering failed assertions selected from the group of:

null pointer assertions;

locking assertions; and

object state assertions.

30. The method of claim 24, wherein the method includes analyzing assertion failures across a number of systems under test.

31. The method of claim 24, wherein the method includes:

registering various failures which are not represented by assertions during testing of software code;

analyzing the various failures against a set of questions;

collecting a history associated with the various failures; and

scoring the various failures according to a failure type based on analyzing the various failures against a set of questions.

32. A method for software testing, comprising:

registering assertions which fail in association with software code executing on the computing device;

analyzing assertions which fail against a set of rules to determine a kind of assertion which repeatedly fails;

collecting a history of assertions which fail in association with the software code executing on the computing device; and

scoring the assertions which fail.

33. The method of claim 32, wherein the method includes correlating assertions which fail with a type of assertion in the software code executing on the computing device.

34. The method of claim 32, wherein the method includes collectively analyzing assertion failures in association with software code executing on a number of computing devices in a system under test.

35. The method of claim 34, wherein the method includes:

collecting a history of assertions which fail in association with the software code executing on the number of computing devices; and

correlating assertion failures according to one or more types of assertions in the software code executing on the number of computing devices.

36. The method of claim 35, wherein the method includes correlating assertion failures in an integrated development environment to improve application of assertions in a coding process.

37. The method of claim 35, wherein the method includes:

generating feedback based on correlating assertion failures according to one or more types of assertions; and

identifying one or more failed assertions by instance of failed assertion type.

38. The method of claim 35, wherein the method includes transmitting report information, identifying one or more failed assertions by instance of failed assertion type, to a developer of the software code.

39. A computer readable medium having instructions for causing a device to perform a method, comprising:

registering assertions which fail during testing of software code;

analyzing failed assertions against a set of questions; and

scoring failed assertions based on analyzing failed assertions against a set of questions.

40. The medium of claim 39, wherein the method includes collecting a history of assertions which fail.

41. The medium of claim 40, wherein the method includes registering assertions, analyzing failed assertions, scoring failed assertions, and collecting a history of assertions which fail across a number of software code tests.

42. The medium of claim 41, wherein the method includes correlating assertions which fail with one or more types of assertions in the number of software code tests.

43. The medium of claim 42, wherein the method includes transmitting report information, identifying one or more failed assertions by instance of failed assertion type, to a developer of the software code.

44. A software testing device, comprising:

a processor;

a memory coupled to the processor; and

means for correlating assertions which fail with one or more types of assertions in a number of software code tests being conducted by the device.

45. The device of claim 44, wherein the means for correlating assertions includes a set of program instructions which execute to track failed assertions and to register a type of assertion in software code associated with a particular failed assertion.

46. The device of claim 44, wherein the device further includes program instructions provided to the memory and executable by the processor to collect a history of assertions which fail across the number of software code tests.

47. The device of claim 44, wherein the device further includes program instructions provided to the memory and executable by the processor to transmit report information, identifying one or more failed assertions by instance of failed assertion type, to a developer of the software code.